## **Commonwealth of Kentucky**

Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

## **Draft**

## AIR QUALITY PERMIT Issued under 401 KAR 52:020

**Permittee Name:** Alcan Packaging

Mailing Address: 6700 Midland Industrial Drive

Shelbyville, Kentucky 40065

**Source Name:** Alcan Packaging

Mailing Address: 6700 Midland Industrial Drive

Shelbyville, Kentucky 40065

Source Location: 6700 Midland Industrial Drive, Shelbyville, Kentucky

Permit Number: V-05-035 Source A. I. #: 3950

**Activity #: APE20040002** 

**Review Type:** Title V/Synthetic Minor

Source ID #: 21-211-00031

**Regional Office:** Frankfort Regional Office

643 Teton Trail, Suite B Frankfort, KY 40601 (502) 264 - 3358

**County:** Shelby

**Application** 

Complete Date: June 20, 2005

Issuance Date: Revision Date: Expiration Date:

> John S. Lyons, Director Division for Air Quality

Revised 8/3/05

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**EP01 B1, B2, B3 and B4 - Boilers** 

## **Description:**

EP01 is 4 boilers, two 3.5 MM Btu/hr Bryant hot water boilers, a 3.0 MM Btu/hr Bryant hot water boiler, and a 2.8 MM Btu/hr Bryant (model RV350-W-FDG) boiler for building heat.

Each boiler utilizes natural gas.

EP01 construction commenced: January 1986

### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:015**, New indirect heat exchangers, applies to new affected facilities less than 250 MM Btu/hr commenced on or after April 9, 1972.

Regulation **401 KAR 59:005**, General provisions, provides for the establishment of monitoring requirements, performance testing requirements, and other general provisions as related to new sources effective December 1, 1982.

## **Operating Limitations:**

1. Comply with the Operating Limitations listed under 401 KAR 51:017 in Section D. 401 KAR 59:015

- **2.** Only natural gas shall be burned.
- **3.** Proper operation and maintenance shall be practiced.

### **Emission Limitations:**

**1.** See 401 KAR 51:017 Emission Limitations listed in Section D of this permit for Emission Limitations that include emissions from the boilers.

#### 401 KAR 59:015

- 2. Section 4(1)(c) limits emissions of **particulate matter** to no more than 0.53 lbs/MM Btu actual heat input.
- 3. Section 4(2) limits visible emissions to a maximum of 20% opacity except for emissions occurring during cleaning of the firebox, blowing of soot, and building of a new fire.
  - **a.** While cleaning of the firebox or blowing of soot is being done, visible emissions are limited to a maximum of 40% opacity for not more than 6 consecutive minutes in any 60 consecutive minutes.
  - **b.** There is no limit to visible emissions opacity while building a new fire provided a manufacturer recommended method is used and the manufacturer recommended time frame for bringing the boiler up to operating conditions is not exceeded.
- **4.** Section 5(1)(c) limits emissions of any gas which contains **sulfur dioxide** to no more than 2.7 lbs/MM Btu actual heat input.

### **Compliance Demonstration Method:**

If deemed necessary, the Cabinet shall require testing in accordance with 40 CFR 60 Appendix A, Methods 9, 5, and 6, respectively. Otherwise, if operated in accordance with Operating Limitations #2 and #3, compliance is assumed.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Testing Requirements:**

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

### **Specific Monitoring Requirements:**

See Emission Limitations

### **Specific Record Keeping Requirements:**

#### 401 KAR 59:015

- 1. A record of the type of fuel burned shall be maintained.
- 2. A copy of the manufacturer's operating and maintenance specifications shall be maintained and made available to appropriate division personnel.
- 3. Any operation or maintenance that is less stringent than the manufacturer's minimum recommendation shall be recorded.
- **4.** Dates and descriptions of maintenance performed as part of compliance with Operating Limitation #3 shall be recorded.

## 401 KAR 51:017

7. See the Specific Record Keeping Requirements listed under 401 KAR 51:017 Section D.

## **Specific Reporting Requirements:**

#### 401 KAR 59:005

Section 3(1)(d) requires written notification of any physical or operational change which may increase the emission rate of any air pollutant to which a standard applies to be furnished to the Cabinet. This notice shall be postmarked 60 days before the change is commenced or as soon as practicable. The notice shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.

### **Specific Control Equipment Operating Conditions:**

N/A

### **Alternate Operating Scenarios:**

N/A

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **EP02** Storage and Mixing Areas

### **Description:**

The storage and mixing areas are supporting facilities for the printing, coating and laminating activities

EP02 construction commenced: March 1986

#### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:212**, New graphic arts facilities using rotogravure and flexography, exempts each affected facility in a county designated attainment commenced after Feb. 4, 1981 but prior to June 24, 1992 except that control devices and procedures required at the time the facility commenced shall continue to be operated and maintained. The above regulation also applies to each affected facility part of a major source in a county designated attainment commenced on or after June 24, 1992.

### **Operating Limitations:**

- 1. Comply with the Operating Limitations listed under 401 KAR 51:017 in Section D.
- 2. Mixing and storage activities shall be performed in such a manner that 401 KAR 59:212 Emission Limitations listed in Section D of this permit are complied with.

#### **Emission Limitations:**

No Emission Limitations apply solely to the Storage and Mixing Areas. See 401 KAR 59:212 and 401 KAR 51:017 Emission Limitations listed in Section D of this permit for Emission Limitations that include emissions from the Storage and Mixing Areas.

### **Testing Requirements:**

### 401 KAR 59:212

No testing requirements are applicable if mixing is in covered containers, storage of raw materials is in closed containers, and piping or closed vessels are used when raw materials are transferred for mixing and use. Otherwise, mixing and storage emission rates shall be determined by methods approved by the Division.

## **Specific Monitoring Requirements:**

### 401 KAR 59:212

Observe whether or not best management practices are utilized when mixing and storing raw materials at least once a week.

### **Specific Record Keeping Requirements:**

#### 401 KAR 59:212

1. Record all monitoring observations related to best management practices (for example: caps were used on all mixing operations observed, raw materials in the mixing and storage room were observed to be in closed containers, and piping was used to minimize emissions where possible). Include, at a minimum, date and time of the observations, if caps were used when mixing, if all known VOC containers

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

were closed, and other activities performed to minimize off-line VOC evaporative losses.

**8.** See Specific Record Keeping Requirements listed under 401 KAR 59:212 in Section D.

## 401 KAR 51:017

**9.** See the Specific Record Keeping Requirements listed under 401 KAR 51:017 Section D.

## **Specific Reporting Requirements:**

### 401 KAR 59:212

Report semiannually whether or not monitoring always confirmed the utilization of best management practices.

## **Alternate Operating Scenarios:**

N/A

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **EP03** Off-Line Parts Cleaning

## **Description:**

The cleaning is a support activity for the printing, coating and laminating.

Two SWS400 Progressive Recovery parts washers (or equivalents) are utilized.

VOC emissions from each parts washer are controlled by a condenser and will equal VOC consumed.

EP03 construction commenced: March 1986

## **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:212**, New graphic arts facilities using rotogravure and flexography, exempts each affected facility in a county designated attainment commenced after Feb. 4, 1981 but prior to June 24, 1992 except that control devices and procedures required at the time the facility commenced shall continue to be operated and maintained. The above regulation also applies to each affected facility part of a major source in a county designated attainment commenced on or after June 24, 1992.

### **Operating Limitations:**

- 1. Comply with the Operating Limitations listed under 401 KAR 51:017 in Section D.
- 2. Off-Line Parts Cleaning shall be performed in such a manner that 401 KAR 59:212 Emission Limitations listed in Section D of this permit are complied with.

### **Emission Limitations:**

No Emission Limitations apply solely to the Off-Line Parts Cleaning. See 401 KAR 59:212 and 401 KAR 51:017 Emission Limitations in Section D of this permit for Emission Limitations that include emissions from the Off-Line Parts Cleaning.

## **Testing Requirements:**

### 401 KAR 59:212

- 1. To demonstrate compliance with the affected Emission Limitations, VOC content of solvents shall be determined using;
  - **a.** Reference Method 24 in Appendix A of 40 CFR 60,
  - **b.** Formulation data from the coating, solvent, or other material manufacturer, or
  - c. An alternative technique approved by the Division and the U.S. EPA. In the event of any inconsistency between any of the accepted techniques, Method 24 test results shall govern unless the permittee can satisfactorily demonstrate to the division and the U.S. EPA that other data is more accurate.

## **Specific Monitoring Requirements:**

#### 401 KAR 59:212

The following requirement applies to make compliance demonstration with the applicable regulation practical.

1. The amount of each cleaning solvent consumed during all off-line parts cleaning shall be monitored over 30-day periods.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Specific Record Keeping Requirements:**

### 401 KAR 59:212

The following requirement applies to make compliance demonstration with the applicable regulation practical.

- 1. The amount (in lbs or gals) of each cleaning solvent consumed during all off-line parts cleaning shall be recorded for each 30-day period.
- 10. The VOC content of each cleaning solution utilized shall be recorded in units complimentary to the amount recorded (weight % with lbs and lbs/gal with gals).
- **11.** See Specific Record Keeping Requirements listed under 401 KAR 59:212 in Section D.

### 401 KAR 51:017

**12.** See the Specific Record Keeping Requirements listed under 401 KAR 51:017 Section D.

## **Specific Reporting Requirements:**

N/A

### **Alternate Operating Scenarios:**

N/A

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **EP04** Extruder Support Facilities

### **Description:**

The support facilities are cyclone and filter controlled resin silos, blender feed hoppers, blenders, and surge bins.

Materials in each surge bin may be directly utilized by any extruder at the source.

EP04 construction commenced: March 1986

### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:010**, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

### **Operating Limitations:**

The following limit shall apply to assure compliance with Emission Limitations #1 and #2.

1. Resin silos, blender feed hoppers, blenders, surge bins, and associated particulate control equipment shall be operated and maintained consistent with good air pollution control practice for minimizing emissions.

### **Emission Limitations:**

- Section 3(1) limits visible emissions from each resin silo, blender feed hopper, blender, and surge bin to less than 20% opacity.
- 2. Section 3(2) limits emissions of particulate matter from each flue, conduit, or duct associated with the resin silos, blender feed hoppers, blenders, and surge bins to a maximum of 2.34 lbs/hr if the process weight rate for the emission unit is 1,000 lbs/hr or less. If the process weight rate for any of the units is above 1,000 lbs/hr, Section 3(2) limits emissions of particulate matter from the unit to a maximum that can be determined (in lbs/hr) by taking the process weight rate for the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate<sup>0.62</sup>).

## **Compliance Demonstration Method:**

Compliance with Operating Limitation #1 may be used to demonstrate compliance unless the Cabinet deems testing in accordance with 40 CFR 60 Appendix A, Method 9 or 5, necessary.

#### **Testing Requirements:**

Testing shall be conducted at such times as may be required by the Division in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

### **Specific Monitoring Requirements:**

The following is required as part of compliance demonstration for Emission Limitations #1 and #2.

1. Inspect respective resin silos, blender feed hoppers, blenders, surge bins, and associated control equipment whenever operating problems are noted and routinely (at least once per month).

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **Specific Record Keeping Requirements:**

The following is required as part of compliance demonstration for Emission Limitations #1 and #2.

- 1. Record observations made when performing the inspections required in <u>Specific Monitoring Requirement #1</u>, including date of the inspections.
- 2. Record maintenance activities that are part of demonstrating compliance with Operating Limitation #1, including date of the maintenance activity.

## **Specific Reporting Requirements:**

N/A

## **Specific Control Equipment Operating Conditions:**

N/A

## **Alternate Operating Scenarios:**

N/A

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## EP05 B5 and B6 - Heat Exchangers

### **Description:**

Each of the 2 heat exchangers is 8.36 MM Btu/hr and is for heating oil to be used in press P7 and control device 7.

Each heat exchanger utilizes natural gas.

EP05 construction commenced: July 2003.

### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:015**, New indirect heat exchangers, applies to new affected facilities less than 250 MM Btu/hr commenced on or after April 9, 1972.

## **Operating Limitations:**

1. See 401 KAR 51:017 Emission Limitations listed in Section D of this permit for Emission Limitations that include emissions from the boilers.

#### 401 KAR 59:015

- **2.** Only natural gas shall be burned.
- **3.** Proper operation and maintenance shall be practiced.

### **Emission Limitations:**

1. See 401 KAR 51:017 Emission Limitations listed in Section D of this permit for Emission Limitations that include emissions from the boilers.

#### 401 KAR 59:015

- 2. Section 4(1)(c) limits emissions of **particulate matter** to no more than 0.43 lbs/MM Btu actual heat input.
- 3. Section 4(2) limits visible emissions to a maximum of 20% opacity except for emissions occurring during cleaning of the firebox, blowing of soot, and building of a new fire.
  - a. While cleaning of the firebox or blowing of soot is being done, visible emissions are limited to a maximum of 40% opacity for not more than 6 consecutive minutes in any 60 consecutive minutes.
  - b. There is no limit to visible emissions opacity while building a new fire provided a manufacturer recommended method is used and the manufacturer recommended time frame for bringing the boiler up to operating conditions is not exceeded.
- 4. Section 5(1)(c) limits emissions of any gas which contains **sulfur dioxide** to no more than 1.92 lbs/MM Btu actual heat input.

## **Compliance Demonstration Method:**

If deemed necessary, the Cabinet shall require testing in accordance with 40 CFR 60 Appendix A, Methods 9, 5, and 6, respectively. Otherwise, if operated in accordance with Operating Limitations #2 and #3, compliance is assumed.

### **Testing Requirements:**

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **Specific Monitoring Requirements:**

N/A

## **Specific Record Keeping Requirements:**

## 401 KAR 59:015

- **1.** A record of the type of fuel burned shall be maintained.
- 2. A copy of the manufacturer's operating and maintenance specifications shall be maintained and made available to appropriate division personnel.
- 3. Any operation or maintenance that is less stringent than the manufacturer's minimum recommendation shall be recorded.
- **4.** Dates and descriptions of maintenance performed as part of compliance with Operating Limitation #3 shall be recorded.

#### 401 KAR 51:017

5. See the Specific Record Keeping Requirements listed under 401 KAR 51:017 Section D.

## **Specific Reporting Requirements:**

N/A

### **Specific Control Equipment Operating Conditions:**

N/A

### **Alternate Operating Scenarios:**

N/A

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## EP09 P3 - Flexographic Printer with Coaters and a Laminator

### **Description:**

EP09 is a 6-station 45.5-inch wide printing press followed by 2 coaters and 1 laminator manufactured by Faustel.

Printing is accomplished utilizing flexographic cylinders.

Key components of the press are a primary substrate (paper) unwind station, a secondary substrate (film) unwind station, 6 flexographic applicators, 2 polymer coating applicators, a laminating adhesive applicator, 4 dryers rated at a total of 7.2 MM Btu/hr, an oven rated at 1.6 MM Btu/hr, and a rewind station. The dryers and oven utilize natural gas.

Only low VOC, no VOC, and water-based materials are utilized by the unit.

EP09 is not vented to a control device.

Construction commenced: April 1991.

### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:212**, New graphic arts facilities using rotogravure and flexography, exempts each affected facility in a county designated attainment commenced after Feb. 4, 1981 but prior to June 24, 1992 except that control devices and procedures required at the time the facility commenced shall continue to be operated and maintained.

Regulation **401 KAR 63:002**, 40 CFR Part 63 national emission standards for hazardous air pollutants, applies to sources that are subject to regulation **40 CFR Part 63 Subpart KK**, National Emission Standards for the Printing and Publishing Industry, and other non-applicable subparts of 40 CFR Part 63. **40 CFR Part 63 Subpart KK** applies to each facility with new and existing wide-web flexographic presses that is a major source of hazardous air pollutants (HAPs).

### **Operating Limitations:**

- 1. Comply with Operating Limitations listed in Section D.
- 2. Operation of the press, including raw material utilization, shall be such that the Emission Limitations listed under 401 KAR 51:017 and 40 CFR Part 63 Subpart KK in Section D of this permit are complied with.

#### 401 KAR 59:212

For this press, Section 2(2) of 401 KAR 59:212 requires controls (that were required at the time of construction or modification) to be maintained.

- 3. VOC emissions shall continue to be controlled through the application of:
  - **a.** Waterborne inks with volatile (water and VOC) portions consisting of 25 percent or less (by volume) VOC, or
  - **b.** Inks which, excluding water, contain 60 percent or more (by volume) nonvolatile material as applied to the substrate, or
  - **c.** Inks with an emission limit of five-tenths (0.5) lb VOC/lb solids as delivered to the applicator.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Note: All other methods for complying with the controls required by Section 2(2) would require a modification to the press.

### **Compliance Demonstration Method:**

If deemed necessary, the Division shall obtain samples of the inks used at the press to verify that the inks meet these requirements. Otherwise, compliance shall be demonstrated through formulation data. If necessary, use the following equations to convert data to a format that can easily be compared to the applicable limitation. Compliance is demonstrated when each ink applied at the press satisfies one of the above requirements.

For inks applied as received from the manufacturer, comparisons to the standard may be made through testing using appropriate EPA methods or through raw data supplied by the ink manufacturers in formulation sheets. The following equations may be useful when demonstrating compliance.

```
%VOC (by volume) of volatile portion = 100 x ink % VOC by volume / ink % volatile by volume
```

% nonvolatile (by volume) excluding water = 100 x ink % solids by volume / (100 - ink % water by volume)

```
VOC content (lbs. of VOC / lb. of solids) = ink VOC content (in lbs/gal or weight %) / ink solids content (in lbs/gal or weight %, respectively)
```

For applied inks that have been altered from the manufacturer's formulation due to thinning or mixing, comparisons to the standard may still be made through testing using appropriate EPA methods or through raw data for all the individual components of the applied ink. The following equations may be useful when demonstrating compliance:

```
%VOC (by volume) of volatile portion = 100 \times \Sigma (volume of each ink x % VOC by volume) + \Sigma (volume of each solvent x % VOC by volume)
```

- +  $\Sigma$  (volume of each other material mixed to the ink x % VOC by volume)] /
- [ $\Sigma$  (volume of each ink x % volatile by volume) +  $\Sigma$  (volume of each solvent) +  $\Sigma$  (volume of each other material mixed to the ink x % volatile by volume)]
- % nonvolatile (by volume) excluding water =  $100 \times [\Sigma]$  (volume of each ink x % solids by volume) +  $\Sigma$  (volume of each other material mixed to the ink x % solids

by volume)] / [ $\Sigma$  (volume of each ink) +  $\Sigma$  (volume of each solvent)

- +  $\Sigma$  (volume of each other material mixed to the ink)
- $\Sigma$  (volume of each ink x % water by volume)
- $\Sigma$  (volume of each solvent x % water by volume)
- $\Sigma$  (volume of each other material mixed to the ink x % water by volume)]

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

VOC content (lbs. of VOC / lb. of solids) =  $[\Sigma (lbs. of each ink x \% VOC by weight)]$ 

- +  $\Sigma$  (lbs. of each solvent x % VOC by weight) +  $\Sigma$  (lbs. of each other material mixed to the ink x % VOC by weight)] / [ $\Sigma$  (lbs. of each ink x % solids by weight)
  - +  $\Sigma$  (lbs. of each other material mixed to the ink x % solids by weight)]

VOC content (lbs. of VOC / lb. of solids) =  $[\Sigma]$  (gallons of each ink x VOC content in lbs/gal) +  $\Sigma$  (gallons of each solvent x VOC content in lbs/gal)

- +  $\Sigma$  (gallons of each other material mixed to the ink x VOC content in lbs/gal)] /  $[\Sigma$  (gallons of each ink x solids content in lbs/gal)
- $+ \Sigma$  (gallons of each other material mixed to the ink x solids content in lbs/gal)]

### **Emission Limitations:**

No Emission Limitations apply solely to the press. However, Emission Limitations listed under 401 KAR 51:017 and 40 CFR Part 63 Subpart KK, in Section D will be affected by emissions from the press.

### **Testing Requirements:**

Comply with Testing Requirements in Section D.

### **Specific Monitoring Requirements:**

## 401 KAR 59:212, 40 CFR Part 63 Subpart KK and 401 KAR 51:017 Limitation

The following requirement is a combination from the applicable regulations and denotes the most stringent requirement resulting from application of the regulations. Additionally, the following requirement is part of practical compliance demonstration for PSD preclusion.

- 1. The amount and type of ink, coating, solvent, or adhesive used (including exempt compounds) at the press shall be monitored over 30-day periods.
- 2. The amount (in lbs or gals) of each cleaning solvent consumed during press cleaning at and around the line shall be monitored over 30-day periods.

### 401 KAR 59:212

The following requirement applies to make compliance demonstration with the applicable regulation practical.

3. The amount (in lbs or gals) of each individual graphic arts material or solvent used in ink mixing or thinning shall be monitored when the mixing or thinning occurs.

### **Specific Record Keeping Requirements:**

1. Comply with the Specific Record Keeping Requirements under 401 KAR 51:017 in Section D.

## 401 KAR 59:212, 40 CFR Part 63 Subpart KK and 401 KAR 51:017 Limitation

The requirements from these regulations have been combined to denote the most stringent requirement resulting from application of the regulations. In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations and the PSD preclusion practical. In accordance with 40 CFR 63.10

(b)(1), the following record keeping data shall be retained on site for at least 2 years.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 2. In accordance with 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the amount (in lbs or gals) and type of ink, coating, solvent, or adhesive used (including exempt compounds) at the press shall be recorded for each 30-day period.
- 3. In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the VOC, HAP (if HAP content is not assumed to be equal to VOC content) content of each ink, coating, solvent, and adhesive utilized at the printing press shall be recorded in units complimentary to the recorded amount (weight % with lbs and lbs/gal with gals).
- **4.** Comply with Specific Record Keeping Requirement #14 in Section D.
- 5. The amount (in lbs or gals) of each cleaning solvent consumed during press cleaning at and around the line shall be recorded over 30-day periods.

## 401 KAR 59:212

The following requirements apply to make compliance demonstration with applicable regulation practical.

- 6. The amount (in lbs or gals) of each individual graphic arts material or solvent used in ink mixing or thinning shall be recorded when the mixing or thinning occurs.
- 7. Density, water content, VOC content, and solids content of inks, coatings, solvents, and adhesives used in the applied coating shall be recorded (in units appropriate for compliance demonstration) as needed for compliance demonstration.
- **8.** VOC or nonvolatile content of each applied ink shall be calculated and recorded, unless already determined by a manufacturer, using the equations in the Compliance Demonstration for Operating Limitations #3.

### **Specific Reporting Requirements:**

- 1. Comply with Specific Reporting Requirements #2 and #8 listed in Section D.
- **2.** Comply with the Specific Reporting Requirements listed under 401 KAR 51:017 in Section D.

### 401 KAR 59:212

The following requirements apply as part of compliance demonstration with the applicable regulation.

- 3. Semiannually report violations of <u>Operating Limitation #3</u> in the period. Include date, time, and duration of each violation. If no violations occur during the period, report the raw material utilized that was closest to each limitation and the days utilized during the period.
- **4.** Semiannually report whether any monitoring or record keeping violations occurred.

## **Alternate Operating Scenarios:**

N/A

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### EP10 P4 - Flexographic Printer

### **Description:**

EP10 is an 8 station 60 inch wide printing press manufactured by W & H utilizing flexographic cylinders.

Key components of the press are a paper, film, or foil unwind station, a corona treater, 8 flexographic coating applicators/printers, 2 dryers with burners rated at a total of 1 MM Btu/hr, and a rewind station. The dryers utilize natural gas.

A hood vents each dryer. The hoods are used to capture VOC emissions from the applicators and the area around the applicators.

The hoods vent to control device #5 (see Section E of this permit for description of the control device).

Construction commenced: April 1992.

## **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:212**, New graphic arts facilities using rotogravure and flexography, exempts each affected facility in a county designated attainment commenced after Feb. 4, 1981 but prior to June 24, 1992 except that control devices and procedures required at the time the facility commenced shall continue to be operated and maintained.

Regulation **401 KAR 63:002**, 40 CFR Part 63 national emission standards for hazardous air pollutants, applies to sources that are subject to regulation **40 CFR Part 63 Subpart KK**, National Emission Standards for the Printing and Publishing Industry, and other non-applicable subparts of 40 CFR Part 63. **40 CFR Part 63 Subpart KK** applies to each facility with new and existing wide-web flexographic presses that is a major source of hazardous air pollutants (HAPs).

## **Operating Limitations:**

- 1. Comply with the Operating Limitations for the Control Device in Section E.
- **2.** Comply with the Operating Limitations in Section D.
- 3. Operation of the press, including raw material utilization, shall be such that the Emission Limitations listed under 401 KAR 51:017 and 40 CFR Part 63 Subpart KK in Section D of this permit are complied with.

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The following limits apply due to compliance assurance requirements for the applicable regulations.

4. In accordance with 40 CFR 63.828(a)(5), the press shall be operated only when interlocked with a parametric monitor for capture efficiency. As a result of interlock utilization, a static pressure gage shall be installed, calibrated, maintained, and operated where appropriate in accordance with manufacturer's instructions.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. In accordance with 40 CFR 63.828(a)(5), the hood controlling emissions from the applicators shall be operated during printing and coating operations at any of the applicators on the press such that the airflow inside the hood's conduit to the oxidizer is approximately equal to the average airflow measured at the same location during the initial capture efficiency determination.

## **Compliance Demonstration Method:**

Compliance shall be demonstrated by interlocking the press so that operation of the press is only allowed when the measured air velocity in the hood's conduit to the oxidizer is at least 1426 ft/min (75% of the average velocity, 1901 ft/min, determined at the same spot in the hood's conduit during an initial capture efficiency determination). If the velocity measurements are at least 1426 ft/min, then airflow is demonstrated to be approximately equivalent. The interlock will cause the press to cease operation if the measured air velocity is below 1426 ft/min.

### **Emission Limitations:**

- 1. See the Emissions Limitations listed under 401 KAR 59:212 in Section D.
- **2.** See the Emissions Limitations listed under 401 KAR 51:017 in Section D.
- 3. See the Emissions Limitations listed under 40 CFR Part 63 Subpart KK in Section D.

## **Testing Requirements:**

- 1. Comply with the Testing Requirements for Control Device in Section E.
- **2.** Comply with the Testing Requirements in Section D.

## **Specific Monitoring Requirements:**

1. Comply with the Monitoring Requirements for Control Device in Section E. 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following limits apply to make compliance demonstration with the applicable regulations practical.

2. In accordance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), air velocity inside the hood's conduit to the oxidizer shall be monitored continuously during printing or coating at any of the applicators on the press.

Note: According to the source's application, <u>Specific Monitoring Requirement #3</u> shall be performed by the interlock on the press.

3. To demonstrate compliance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), proper operation of the airflow interlocks shall be verified annually. Verifications shall confirm that calibrations for airflow remain accurate and that settings have not changed. If necessary, make corrections during the verification so that the result is no net change in the interlock effectiveness.

## 401 KAR 59:212, 40 CFR Part 63 Subpart KK and 401 KAR 51:017 Limitation

The following requirement is a combination from the applicable regulations and denotes the most stringent requirement resulting from application of both the regulations. Additionally, the following requirement is part of practical compliance demonstration for PSD preclusion.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. The amount and type of ink, coating, or solvent used (including exempt compounds) at the printing press shall be monitored over 30-day periods.

## 401 KAR 59:212 and 401 KAR 51:017 Limitation

The following requirement applies to make compliance demonstration with the applicable regulation practical. Additionally, the following requirement is part of practical compliance demonstration for PSD preclusion.

5. The amount of each cleaning solvent consumed during press cleaning at and around the line shall be monitored over 30-day periods.

## **Specific Record Keeping Requirements:**

In accordance with 40 CFR 63.10(b)(1), record keeping data for requirements #1-#6 shall be retained on site for at least 2 years.

- **1.** Comply with the Specific Record Keeping Requirements for Control Device in Section E.
- **2.** Comply with the Specific Record Keeping Requirements in Section D.

## 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical.

- 3. As required by 40 CFR 63.829(b)(1) and (3), 40 CFR 63.10(b)(2)(vii), and 40 CFR 63.10(c)(1), the pass or fail set point for air velocity inside the hood's conduit to the oxidizer, determined during the initial capture efficiency determination, shall be recorded if testing is redone.
- 4. As required by 40 CFR 63.829(b)(1), record each date when proper operation of the press's interlock is verified. Record the observed interlock setting and drift from the initial accuracy of the air velocity measuring device during the verification (prior to any correction changes).

### 401 KAR 59:212, 40 CFR Part 63 Subpart KK and 401 KAR 51:017 Limitation

The requirements from these regulations have been combined to denote the most stringent requirement resulting from application of both the regulations. In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations and the PSD preclusion practical.

- 5. In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the amount (in lbs or gals) and type of ink, coating, or solvent used (including exempt compounds) at the printing press shall be recorded for each 30-day period.
- 6. In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the VOC, HAP (if HAP content is not assumed to be equal to VOC content) content of each ink, coating, and solvent utilized at the printing press shall be recorded in units complimentary to the recorded amount (weight % with lbs and lbs/gal with gals).

## 401 KAR 59:212

The following requirements apply to make compliance demonstration with the applicable regulation practical.

- 7. The amount (in lbs or gals) of each cleaning solvent consumed during press cleaning at and around the line shall be recorded for each 30-day period.
- **8.** The VOC content of each cleaning solution utilized shall be recorded in units

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

complimentary to the amount recorded (weight % with lbs and lbs/gal with gals).

## **Specific Reporting Requirements:**

Comply with the Reporting Requirements in Section D.

## **Alternate Operating Scenarios:**

N/A

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### EP21 and EP22 L8 and L9 - Solventless Laminators

### **Description:**

**L8** and **L9** are manufactured by Rotomec. Each has 1 application station.

Adhesives and curatives contain 100% solids.

Key components of each laminator are 2 substrate (film or foil) unwind stations, 2 corona treaters, a coating applicator, and a rewind station.

Due to the raw materials and technology utilized, all emissions from these laminators have been assumed to be from cleaning. The units are not vented to a control device.

Uncontrolled potential VOC emissions from both of these laminators have been determined to be less than 10 tons/yr (based on data provided in the application for these units).

Construction commenced: 2000.

## **APPLICABLE REGULATIONS:**

The solventless laminators are exempt from regulation **401 KAR 59:210**, New fabric, vinyl and paper surface coating operations, even though the regulation applies to each affected facility part of a major source in a county designated attainment commenced on or after June 24, 1992. The laminators are exempt from **401 KAR 59:210** in accordance with Section 6(3)(c) of the regulation.

Regulation **401 KAR 63:002**, 40 CFR Part 63 national emission standards for hazardous air pollutants, applies to sources that are subject to regulation **40 CFR Part 63 Subpart KK**, National Emission Standards for the Printing and Publishing Industry, and other non-applicable subparts of 40 CFR Part 63. **40 CFR Part 63 Subpart KK** applies to each facility with product and packaging rotogravure or wide-web flexographic presses and other equipment that the source chooses to include that is a major source of hazardous air pollutants (HAPs).

### **Operating Limitations:**

Comply with the Operating Limitations listed under 401 KAR 51:017 and 40 CFR Part 63 Subpart KK in Section D.

### **Emission Limitations:**

- 1. See the Emissions Limitations listed under 401 KAR 51:017 in Section D.
- 2. See the Emissions Limitations listed under 40 CFR Part 63 Subpart KK in Section D.

#### **Testing Requirements:**

Comply with Testing Requirements #1 and #2 listed in Section D.

## **Specific Monitoring Requirements:**

### 40 CFR Part 63 Subpart KK

The following requirement applies to make compliance demonstration with the applicable regulation practical.

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# SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. The amount and type of adhesive and solvent used at each of the laminators shall be monitored monthly to comply with the applicable monthly record keeping requirement.

### **Specific Record Keeping Requirements:**

**1.** Comply with the Specific Record Keeping Requirements listed under 401 KAR 51:017 in Section D.

## 40 CFR Part 63 Subpart KK

In accordance with 40 CFR 63.10(b)(1), the following record keeping data shall be retained on site for at least 2 years. In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulation practical.

- 2. In accordance with 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the amount (in lbs or gals) and type of each solvent or adhesive used at each laminator shall be recorded monthly.
- 3. In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the VOC, HAP (if HAP content is not assumed to be equal to VOC content) content of each solvent and adhesive utilized at the laminators shall be recorded in units complimentary to the recorded amount (weight % with lbs and lbs/gal with gals).
- **4.** Comply with Specific Record Keeping Requirement #14 listed in Section D of this permit.

#### **401 KAR 51:017 Limitation**

The following requirements apply to make compliance demonstration for PSD preclusion practical.

- 5. Lbs or gallons of each cleaning solution consumed at and around units L8 and L9 shall be recorded for each 30-day period.
- 6. The VOC percentage (by weight) or the VOC content (in lbs/gal), as appropriate for demonstrating compliance, of each cleaning solution utilized at and around units L8 and L9 shall be recorded.

### **Specific Reporting Requirements:**

- 1. Comply with the Specific Reporting Requirements listed under 401 KAR 51:017 in Section D.
- 2. Comply with Specific Reporting Requirements #2 and #8 listed under in Section D.

### **Alternate Operating Scenarios:** NA

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **Group Requirements:**

## P1, P5, P7, P9, P10, L4, L5, and L7

These units are completely contained within a Building Enclosure.

## L1, L2, L3, L6, and L10

These units' applicator(s) are within Enclosures for Applicators.

#### **EP06** P1 - Rotogravure Printer

### **Description:**

EP06 is an 8 station 49 inch wide printing press manufactured by Rotomec utilizing rotogravure cylinders.

Key components of the press are a paper, film, or foil unwind station, a corona treater, 8 gravure coating applicators/printers, 4 ovens rated at a total of 11.2 MM Btu/hr, and a rewind station.

The ovens utilize natural gas and any given job may utilize 1 to 4 of the ovens.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #4 (see Section E of this permit for description of the control device).

Construction commenced: 1986.

## **EP13 P5 - Rotogravure Printer**

### **Description:**

EP13 is an 8 station 35.5 inch wide printing press manufactured by Rotopak utilizing rotogravure cylinders.

Key components of the press are a paper, film, or foil unwind station, a corona treater, 8 gravure coating applicators/printers, 8 ovens rated at a total of 6.6 MM Btu/hr, and a rewind station.

The ovens utilize hot oil that recovers heat generated in control device #3.

The unit is completely contained within a building enclosure (see Section E of this permit for details). Ovens are vented to Control Device #3 (see Section E of this permit for description of the control device).

Construction commenced: 1994.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **EP15 P7 - Rotogravure Printer with Laminator**

### **Description:**

EP15 is a 10 station 59 inch wide printing press utilizing rotogravure cylinders.

Key components of the press are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, 2 corona treaters, 12 gravure coating applicators/printers, 12 ovens rated at a total of 6.6 MM Btu/hr, and a rewind station.

The ovens utilize hot oil from heat exchangers B5 and B6 and heat generated in control device #7. The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #7 (see Section E of this permit for description of the control device).

Construction commenced: July 2003.

### EP18 P9 - Rotogravure Printer with Laminator

#### **Description:**

EP18 is a 10 station 47.25 inch wide printing press utilizing rotogravure cylinders. .

Key components of the press are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, 2 corona treaters, 10 gravure coating applicators/printers, 10 ovens rated at a total of 6.6 MM Btu/hr, and a rewind station.

The ovens utilize natural gas.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #8 (see Section E of this permit for description of the control device).

Construction commenced: projected for 2007.

### **EP19 P10 - Rotogravure Printer**

#### **Description:**

EP19 is a 4 station 27.5 inch wide Rotopak 3000-5ES 700/150 printing press manufactured by Valmet Rotomec utilizing rotogravure cylinders.

Key components of the press are a paper, film, or foil unwind station, a corona treater, 6 gravure coating applicators/printers, 6 ovens rated at a total of 9.0 MM Btu/hr, and a rewind station.

The ovens utilize natural gas.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #6 (see Section E of this permit for description of the control device).

Construction commenced: 2001.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **EP12 L4 - Laminating Line**

### **Description:**

EP12 is a 2 station 35.5 inch wide Triplex laminator manufactured by Polynorm.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, corona treaters for each unwind station, 2 coating applicator/printer, 2 ovens rated at a total of 5.0 MM Btu/hr, and a rewind station.

The ovens utilize natural gas and both are operated any time the machine runs.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #3 (see Section E of this permit for description of the control device).

Construction commenced: 1994.

### EP14 L5 - Laminating Line

### **Description:**

EP14 is a 2 station 47 inch wide Polynorm III polylaminator manufactured by Polytype.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, corona treaters for each unwind station, 2 coating applicator/printer, 2 ovens rated at a total of 11.0 MM Btu/hr, and a rewind station.

The ovens utilize natural gas and are operated independently.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

Ovens are vented to Control Device #6 (see Section E of this permit for description of the control device).

Construction commenced: 2000.

## EP16 L7 - Laminating/Coating Line

#### **Description:**

EP16 is a 2 station 47 inch wide triplex laminator

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, 3 corona treaters, 2 coating applicators/printers, 2 ovens rated at a total of 6.6 MM Btu/hr and a rewind station.

The ovens utilize natural gas.

The unit is completely contained within a building enclosure (see Section E of this permit for details).

The ovens are vented to Control Device #5 (see Section E of this permit for description of the control device).

Construction commenced: projected for 2007.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **EP07** L1 - Laminating Line

### **Description:**

EP07 is a 2 station 56 inch wide laminator manufactured by Polytype.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, corona treaters for each unwind station, 2 coating applicators/printers, 2 ovens rated at a total of 8.8 MM Btu/hr, and a rewind station.

The ovens utilize natural gas and are operated independently.

Each coater is within an enclosure (see Enclosures for Applicators Only in Section E of this permit for details).

The enclosures and the ovens are vented to Control Device #4 (see Section E of this permit for description of the control device).

Construction commenced: 1986.

## EP08 L2 - Laminating/Coating/Printing Line

## **Description:**

EP08 is a 3 station 57 inch wide laminating/coating/printing line manufactured by Er-We-Pa. The 1<sup>st</sup> station is used to print, coat, or laminate. The other 2 stations can only laminate utilizing hot melt adhesive extruders.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, corona treaters for each unwind station, 1 coating applicator/printer, 1 oven rated at 4.8 MM Btu/hr, 2 hot melt extrusion coaters, and a rewind station.

The oven utilizes natural gas.

Heat is vented from the hot melt adhesive extruders. There is no other need for ventilation at the extruders since VOC and particulate matter emissions are assumed to be negligible.

Only the 1<sup>st</sup> applicator is within an enclosure (see Enclosures for Applicators Only in Section E of this permit for details). The 1<sup>st</sup> applicator and the oven are vented to Control Device #5 (see Section E of this permit for description of the control device).

Construction commenced: 1987.

## EP11 L3 - Laminating/Coating/Printing Line

#### **Description:**

EP11 is a 3 station 60 inch wide laminating/coating/printing line manufactured by Black Clawson. The 1<sup>st</sup> and 2<sup>nd</sup> stations are used to print, coat, or laminate. Printing will utilize rotogravure or flexographic cylinders. The 3<sup>rd</sup> station can only coat or laminate utilizing hot melt materials through 1 of 3 extruders.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

station, corona treaters for each unwind station, 2 coating applicator/printer, 2 ovens rated at a total of 6.6 MM Btu/hr, 1 hot melt extrusion coater, and a rewind station.

The ovens utilize natural gas.

Heat is vented from the hot melt coating/adhesive applicators at the 3<sup>rd</sup> coater. There is no other need for ventilation at the applicator since VOC and particulate matter emissions are assumed to be negligible.

Only the 1<sup>st</sup> and 2<sup>nd</sup> applicators are within enclosures (see Enclosures for Applicators Only in Section E of this permit for details). The 1<sup>st</sup> and 2<sup>nd</sup> applicators and the ovens are vented to Control Device #5 (see Section E of this permit for description of the control device).

Construction commenced: September 1992.

### EP20 L6 - Laminating/Coating Line

### **Description:**

EP20 is a 2 station 57 inch wide Triplex laminator/coater.

Applicators are capable of printing, coating, or laminating only the front or back of a substrate but the side can be reversed between the 1<sup>st</sup> and 2<sup>nd</sup> applicators.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, 3 corona treaters, 2 coating applicators/printers, 2 ovens rated at a total of 6.6 MM Btu/hr, and a rewind station.

The ovens utilize natural gas.

Both the applicators are within enclosures (see Enclosures for Applicators Only in Section E of this permit for details).

The enclosures and ovens are vented to Control Device #5 (see Section E of this permit for description of the control device).

Construction commenced: projected for 2005.

## EP17 L10 - Laminating/Coating Line

### **Description:**

EP17 is a 2 station 56 inch wide triplex laminator.

Applicators are capable of printing, coating, or laminating only the front or back of a substrate but the side can be reversed between the 1<sup>st</sup> and 2<sup>nd</sup> applicators.

Key components of the laminator are a primary substrate (paper, film, or foil) unwind station, a secondary substrate (film or foil) unwind station, a tertiary substrate (film or foil) unwind station, 3 corona treaters, 2 coating applicators/printers, 2 ovens rated at a total of 6.6 MM Btu/hr, and a rewind station.

The ovens utilize natural gas.

Both the applicators are within enclosures (see Enclosures for Applicators Only in Section E of this permit for details).

The enclosures and ovens are vented to Control Device #9 (see Section E of this permit for description of the control device).

Construction commenced: projected for 2007.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Regulations 401 KAR 59:212, and 40 CFR Part 63 Subpart KK apply to all affected facilities listed in Table 1 and Table 2.

Table 1 - The ovens of the units in Table 1 are vented to a control device and the units are

completely contained within a building enclosure.

EMISSION UNIT	OPERATION	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATIONS
EP06 (P1)	P1 - Rotogravure Printer Construction Commenced: 1986	Ovens are vented to Control Device #4 Latest Oxidizer Destruction Efficiency test: 11/2004	
EP13 (P5)	P5 - Rotogravure Printer Construction Commenced: 1994	Ovens are vented to Control Device #3 Latest Oxidizer Destruction Efficiency test: 6/2000	
EP15 (P7)	P7 - Rotogravure Printer with Laminator Construction Commenced: 2003	Ovens are vented to Control Device #7 Latest Oxidizer Destruction Efficiency test: 12/2004	
EP18 (P9)	P9 - Rotogravure Printer with Laminator Construction Commenced: Projected for 2007	Ovens are vented to Control Device #8	
EP19 (P10)	P10 - Rotogravure Printer Construction Commenced: 2001	Ovens are vented to Control Device #6 Latest Oxidizer Destruction Efficiency test: 12/2003	
EP12 (L4)	L4 – Laminating Line Construction Commenced: 1994	Ovens are vented to Control Device #3	
EP14 (L5)	L5 – Laminating Line Construction Commenced: 2000	Ovens are vented to Control Device #6	
EP16 (L7)	L7 – Laminating/Coating Line Construction Commenced: Projected for 2007	Ovens are vented to Control Device #5 Latest Oxidizer Destruction Efficiency test: 11/2004	

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**Table 2** - The one or more applicators of the units in Table2 are within an enclosure. The enclosures/applicators and ovens are vented to a control device.

EMISSION UNIT	OPERATION / Construction Date	CONTROL EQUIPMENT	OTHER APPLICABLE REGULATION S
EP07 (L1)	L1 – Laminating Line Construction Commenced: 1986	Each coater is within an enclosure. The enclosures and the ovens are vented to Control Device #4.	
EP08 (L2)	L2 – Laminating/Coating/Printing Line Construction Commenced: 1987	Only the 1 <sup>St</sup> applicator is within an enclosure. The 1 <sup>St</sup> applicator and the oven are vented to Control Device #5.	401 KAR 59:010
EP11 (L3)	L3 – Laminating/Coating/Printing Line Construction Commenced: September 1992	Only the 1 <sup>St</sup> & 2 <sup>nd</sup> applicators are within enclosures. The 1 <sup>St</sup> , 2 <sup>Snd</sup> applicators and the ovens are vented to Control Device #5.	401 KAR 59:010
EP20 (L6)	L6 – Laminating/ Coating Line Construction Commenced: Projected for 2005	Both applicators are within enclosures. The enclosures and ovens are vented to Control Device #5.	
EP17 (L10)	L10 – Laminating/Coating Line Construction Commenced: Projected for 2007	Both applicators are within enclosures. The enclosures and ovens are vented to Control Device #9.	

#### **APPLICABLE REGULATIONS:**

Regulation **401 KAR 59:212**, New graphic arts facilities using rotogravure and flexography, exempts each affected facility in a county designated attainment commenced after Feb. 4, 1981 but prior to June 24, 1992 except that control devices and procedures required at the time the facility commenced shall continue to be operated and maintained. The above regulation also applies to each affected facility part of a major source in a county designated attainment commenced on or after June 24, 1992.

Regulation **401 KAR 63:002**, 40 CFR Part 63 national emission standards for hazardous air pollutants, applies to sources that are subject to regulation **40 CFR Part 63 Subpart KK**, National Emission Standards for the Printing and Publishing Industry, and other non-applicable subparts of 40 CFR Part 63. **40 CFR Part 63 Subpart KK** applies to each facility with new and existing product and packaging rotogravure presses that is a major source of hazardous air pollutants (HAPs).

## Applicable only to L2 and L3

Regulation **401 KAR 59:010**, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## **Operating Limitations:**

- 1. For emission points listed in Table 1, comply with the Operating Limitations for Building Enclosures in Section E.
- **2.** For emission points listed in Table 2, comply with the Operating Limitations for Applicator Enclosures in Section E.
- **3.** Comply with the Operating Limitations for the Control Devices in Section E.
- **4.** Comply with the Operating Limitations in Section D.
- 5. Operation of each press, including raw material utilization, and operation of capture/control devices on each press shall be such that the Emission Limitations listed in Section D of this permit is complied with.

## 401 KAR 59:010 (Applicable only to L2 and L3)

The following limit shall apply to assure compliance with Emission Limitations #2 and #3.

- **6.** Extruders shall be operated and maintained consistent with good air pollution control practice for minimizing emissions.
- 7. The permittee shall remove laminator L2 prior to installation of laminator L6. This will provide adequate oxidizer capacity on Oxidizer 5 for laminator L6.

### **Emission Limitations:**

**1.** See the Emissions Limitations listed in Section D.

## 401 KAR 59:010 (Applicable only to L2 and L3)

- 2. Section 3(1) limits visible emissions from each extruder to less than 20% opacity.
- 3. Section 3(2) limits emissions of particulate matter from each flue, conduit, or duct associated with the extruders to a maximum of 2.34 lbs/hr each if the process weight rate for the extruder is 1,000 lbs/hr or less. If the process weight rate for either of the extruders is above 1,000 lbs/hr, Section 3(2) limits emissions of particulate matter from the extruder to a maximum that can be determined (in lbs/hr) by taking the process weight rate for the unit (in tons/hr), raising the process weight rate value to the 0.62 power, and multiplying by 3.59 (maximum = 3.59 x process weight rate<sup>0.62</sup>). **Compliance Demonstration Method:**

Compliance with Operating Limitation #6 may be used to demonstrate compliance unless the Cabinet deems testing in accordance with 40 CFR 60 Appendix A, Method 9 or 5, necessary.

## **Testing Requirements:**

- 1. For emission points listed in Table 1, comply with the Testing Requirements for Building Enclosures in Section E.
- **2.** For emission points listed in Table 2, comply with the Testing Requirements for Applicator Enclosures in Section E.
- 3. Comply with the Testing Requirements for the Control Device in Section E.
- **4.** Comply with the Testing Requirements in Section D.

## **Specific Monitoring Requirements:**

1. For emission points listed in Table 1, comply with the Monitoring Requirements for Building Enclosures in Section E.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- **2.** For emission points listed in Table 2, comply with the Monitoring Requirements for Applicator Enclosures in Section E.
- 3. Comply with the Monitoring Requirements for the Control Device in Section E.

### 401 KAR 59:212, 40 CFR Part 63 Subpart KK and 401 KAR 51:017 Limitation

The following requirement is a combination from the applicable regulations and denotes the most stringent requirement resulting from application of the regulations. Additionally, the following requirement is part of practical compliance demonstration for PSD preclusion.

The amount and type of ink, coating, or solvent used (including exempt compounds) at the printing press shall be monitored over 30-day periods.

### 401 KAR 59:212 and 401 KAR 51:017 Limitation

The following requirement applies to make compliance demonstration with the applicable regulation practical. Additionally, the following requirement is part of practical compliance demonstration for PSD preclusion.

5. The amount of each cleaning solvent consumed during press cleaning at and around the line shall be monitored over 30-day periods.

### **Specific Record Keeping Requirements:**

In accordance with 40 CFR 63.10(b)(1), record keeping data for requirements #1, #2, #3,#4, #5 and #6 shall be retained on site for at least 2 years.

- 1. For emission points listed in Table 1, comply with the Record Keeping Requirements for Building Enclosures in Section E.
- **2.** For emission points listed in Table 2, comply with the Record Keeping Requirements for Applicator Enclosures in Section E.
- **3.** Comply with the Record Keeping Requirements for the Control Device in Section E.
- **4.** Comply with the Record Keeping Requirements in Section D.
- In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the amount (in lbs or gals) and type of ink, coating, or solvent used (including exempt compounds) at each printing press shall be recorded for each 30-day period.
- 6. In accordance with 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(vii), the VOC, HAP (if HAP content is not assumed to be equal to VOC content) content of each ink, coating, and solvent utilized at each printing press shall be recorded in units complimentary to the recorded amount (weight % with lbs and lbs/gal with gals).

### 401 KAR 59:212

The following requirements apply due to the stated regulation or to make compliance demonstration with the applicable regulation practical.

- 7. The amount (in lbs or gals) of each cleaning solvent consumed during press cleaning at and around the line shall be recorded for each 30-day period.
- 8. In accordance with 401 KAR 59:212 Section 4(6)(d) and (f), the VOC, exempt solvent, and water content (as applied) of each ink, coating, solvent, and cleaning solution utilized shall be recorded in units complimentary to the amount recorded (weight % with lbs and lbs/gal with gals). This requirement overlaps requirement #6 only if the purchased and as applied VOC content is equal.
- 9. In accordance with 401 KAR 59:212 Section 4(6)(b), the application method and substrate type shall be recorded daily.

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## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

10. In accordance with 401 KAR 59:212 Section 4(6)(a), the applicable regulation numbers shall be recorded with the daily records.

## 401 KAR 59:010 (Applicable only to L2 and L3)

The following is required as part of compliance demonstration for Emission Limitations #2 and #3.

11. Record maintenance activities that are part of demonstrating compliance with Operating Limitation #6, including date of the maintenance activity.

## **Specific Reporting Requirements:**

Comply with the Reporting Requirements in Section D.

**Alternate Operating Scenarios:** NA

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## **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	2 Wet and Dry Grinders for Repair of Rubber on Printing Cylinders (each is controlled by a series of filters: a course filter followed by a furnace type filter and a bag filter)	401 KAR 59:010
2.	A 1,200 Btu/hr Lab Bunsen Burner	None
3.	Multiple Office Furnaces and Make-Up Air Units	None
4.	2 Unit Heaters	None
5.	A 75,000 Btu/hr Water Heater	None
6.	Trim Systems	401 KAR 59:010
7.	Bailing Systems	401 KAR 59:010

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

### **Operating Limitations:**

## 40 CFR Part 63 Subpart KK

The following limits apply to each press, coater, and laminator always or intermittently vented to a control device as a result of 40 CFR 63 Subpart A, general provisions, applicability referenced in 40 CFR 63.823.

- 1. In accordance with 40 CFR 63.6(e)(3), the permittee shall develop, implement, retain, and revise as necessary a startup, shutdown, and malfunction (SSM) plan for each press, coater, and laminator always or intermittently vented to a control device.
  - **a.** The procedures developed for and contained in the SSM plan shall be complied with and are incorporated as an enforceable part of this permit by reference.
  - **b.** All revisions to this plan shall supersede earlier SSM plans without requiring a permit revision and shall automatically be incorporated as an enforceable part of this permit by reference also.
  - c. If the plan does not address a startup, shutdown, or malfunction event that occurs, the SSM plan may require revision in accordance with 40 CFR 63.6(e)(3)(vii)(A).
  - **d.** If the plan does not provide for the operation during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards, the SSM plan may require revision in accordance with 40 CFR 63.6(e)(3)(vii)(B).
  - e. If the plan does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable, the SSM plan may require revision in accordance with 40 CFR 63.6(e)(3)(vii)(C).
  - f. If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the SSM plan shall be revised within 45 days after the event as specified in 40 CFR 63.6(e)(3)(viii).
- 2. In accordance with 40 CFR 63.6(e)(1)(ii), malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the SSM plan.
- 3. Routine or otherwise predictable (as defined in the SSM plan) monitoring system malfunctions shall be repaired immediately in accordance with 40 CFR 63.8(c)(1). To ensure immediate repairs, necessary parts for routine repairs of the affected equipment shall be kept readily available.
- 4. Monitoring systems shall be installed such that representative measurements of process parameters are obtained as required in 40 CFR 63.8(c)(2).
- 5. Monitoring systems shall be in continuous operation except when intermittently controlled stations are in bypass mode and except for system breakdowns, repairs, maintenance, and calibration as required in 40 CFR 63.8(c)(4).
- 6. In accordance with 40 CFR 63.8(d)(2), a monitoring system quality control program, including a site-specific performance evaluation test plan described in 40 CFR 63.8 (e) control program shall include a written protocol that describes procedures for:

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- **a.** Initial and subsequent calibration of temperature and pressure monitoring devices,
- **b.** Determination and adjustment of monitoring device calibration drifts,
- **c.** Preventative maintenance for the monitoring devices (including any spare parts kept in inventory),
- **d.** Data recording, calculations, and reporting,
- e. Accuracy audit procedures, and
- **f.** Corrective actions when monitoring devices malfunction.

If procedures are also required in the SSM plan, the procedures may be united into the SSM plan to avoid duplication of planning and record keeping efforts.

7. Operation of a printer, coater or laminator, including raw material utilization, and operation of capture/control devices on the equipment shall be such that total HAP emissions each month from the presses, coaters, and laminators shall be limited to a maximum of 5% of the total HAP applied.

### 401 KAR 51:017

8. For any 12 consecutive month period, raw materials and control devices used at **Constructions Prior to August 1999** shall be such that VOC emitted from the group (including mixing, storage, and clean-up activities) is  $\leq 230$  tons per year (demonstrated monthly).

## Where the Constructions are: EP01, P1, P3, P4, P5, L1, L2, L3, and L4

9. For any 12 consecutive month period, raw materials and control devices used at Constructions After August 1999 shall be such that VOC emitted from the group (including mixing, storage, and clean-up activities) is  $\leq 230$  tons per year (demonstrated monthly).

Where the Constructions are: EP05, P7, P9, P10, L5, L6, L7, L8, L9, and L10 Emission Limitations:

## 401 KAR 59:212 Emission Limitations

## Applicable only to P1, L1, and L2

1. For each affected facility commenced after Feb. 4, 1981 but prior to June 24, 1992, Section 2(2) requires controls (that were required at the time of construction or modification) to be maintained. For each of these affected facilities, the permittee was and shall continue to be required to control VOC emissions as follows:

VOC discharge into the atmosphere shall be limited to a maximum of 35% by weight of the total VOC input into the affected facility.

### Applicable only to P5, P7, P9, P10, L3, L4, L5, L6, L7, and L10

2. For each packaging rotogravure printing affected facility commenced after June 24, 1992, Section 3(1) limits VOC discharge into the atmosphere to a maximum of 35% by weight of the total VOC input into the affected facility.

### Applicable only to P4

3. For each flexographic printing affected facility commenced after June 24, 1992, Section 3(2) limits VOC discharge into the atmosphere to a maximum of 40% by weight of the total VOC input into the affected facility.

Where: An affected facility means a press, coater or laminator and its associated activities (mixing, storage, and clean-up)

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Compliance Demonstration Method:**

Total VOCs input into an affected facility over each 30-day period shall be controlled so that no more than 35% (or 40% for P4) by weight is emitted into the atmosphere. Use the following equations (or equivalents) to demonstrate weight percent of VOCs emitted.

**Weight percentage of VOCs emitted** = VOC emitted / VOC input x 100 Where:

**VOC input** =  $\Sigma$  (lbs of ink, coating, or solvent input to the unit x VOC weight % of ink, coating, or solvent)

 $+\Sigma$  (lbs of cleaning solution consumed during cleaning of the unit and parts in the press x VOC weight % of cleaning solution)

**VOC emitted** =  $\Sigma$  (lbs of ink, coating, or solvent input to the unit x VOC weight % of ink, coating, or solvent)

x (1 – VOC capture efficiency x VOC control efficiency + emission factor for mixing and storage of inks, coatings, and solvents)

 $+\Sigma$  (lbs of cleaning solution consumed during cleaning of parts in the unit

x VOC weight % of cleaning solution) +  $\Sigma$  (lbs of cleaning solution consumed during unit cleaning at and around the line x VOC weight % of cleaning solution)

x (1 – VOC capture efficiency realized at and around the line during cleaning x VOC control efficiency)

And,

# lbs of cleaning solution consumed during cleaning of parts in the unit =

lbs of cleaning solution consumed during all off-line parts cleaning x lbs of VOC applied at the unit / lbs of VOC applied at all units at the facility

**Emission factor** for mixing and storage of inks, coatings, and solvents is 0.2% of VOC throughput (total VOC usage) when best management practices are utilized. Best management practices are a minimization of emissions from supporting activities and shall include performance of mixing in capped containers, storage of raw materials in closed containers, and utilization of closed vessels or piping when raw materials are transferred for mixing and use. Otherwise, testing shall be performed in accordance appropriate EPA testing methods to determine a representative emission factor.

For a line that is in a building enclosure, **VOC capture efficiency** realized at and around the line during cleaning was demonstrated to be 100%, for all other lines VOC capture efficiency realized at and around the line during cleaning shall be assumed to be 40% unless testing is performed in accordance with appropriate EPA testing methods to determine a more representative capture efficiency.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

For the formulas above, the control efficiency of the thermal oxidizers is the efficiency established during the most recent performance test.

A control efficiency of 0% shall be assumed for all periods the thermal oxidizers are receiving emissions from the presses during which, for a period of 3 hours or more, the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test.

#### **401 KAR 51:017 Emission Limitations**

**PSD VOC Synthetic Minor Limits** have voluntarily been accepted to avoid applicability of 401 KAR 51:017 requirements. There are two sets of limits, one for Constructions prior to August 1999 and one for Constructions after August 1999.

1. Constructions Prior to August 1999 Group (EP01, P1, P3, P4, P5, L1, L2, L3, and L4):

For any 12 consecutive month period, VOC emissions form the group (including mixing, storage, and clean-up activities) shall be less than or equal to 230 tons as demonstrated on a monthly basis.

2. Constructions After to August 1999 Group (EP05, P7, P9, P10, L5, L6, L7, L8, L9 and L10):

For any 12 consecutive month period, VOC emissions form the group (including mixing, storage, and clean-up activities) shall be less than or equal to 230 tons as demonstrated on a monthly basis.

#### **Compliance Demonstration Method:**

Compliance can be demonstrated by utilizing performance test results and Division approved estimates, collecting raw data, and calculating VOC emissions using the following equation (or an equivalent).

**VOC emitted (lbs)** =  $\Sigma$  (lbs of ink, coating, or solvent input to each unit in the group x VOC weight % of ink, coating, or solvent)

x (1 – VOC capture efficiency x VOC control efficiency

- + emission factor for mixing and storage of inks, coatings, and solvents)
- $+\Sigma$  (lbs of cleaning solution consumed during cleaning of parts in each unit in the group x VOC weight % of cleaning solution)
- $+\Sigma$  (lbs of cleaning solution consumed during unit cleaning at and around the line x VOC weight % of cleaning solution)
  - x (1 VOC capture efficiency realized at and around the line during cleaning x VOC control efficiency)

And.

# lbs of cleaning solution consumed during cleaning of parts in a unit =

lbs of cleaning solution consumed during all off-line parts cleaning x lbs of VOC applied at the unit / lbs of VOC applied at all units at the facility

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Where:

Unit can be a press, coater or laminator.

**Emission factor** for mixing and storage of inks, coatings, and solvents is 0.2% of VOC throughput (total VOC usage) when best management practices are utilized. Best management practices are a minimization of emissions from supporting activities and shall include performance of mixing in capped containers, storage of raw materials in closed containers, and utilization of closed vessels or piping when raw materials are transferred for mixing and use. Otherwise, testing shall be performed in accordance appropriate EPA testing methods to determine a representative emission factor.

For a line that is in a building enclosure, **VOC capture efficiency** realized at and around the line during cleaning was demonstrated to be 100%, for all other lines VOC capture efficiency realized at and around the line during cleaning shall be assumed to be 40% unless testing is performed in accordance with appropriate EPA testing methods to determine a more representative capture efficiency.

For the formulas above, the control efficiency of the thermal oxidizers is the efficiency established during the most recent performance test.

A control efficiency of 0% shall be assumed for all periods the thermal oxidizers are receiving emissions from the presses during which, for a period of 3 hours or more, the average combustion chamber temperature of the thermal oxidizer is more than  $28^{\circ}\text{C}$  ( $50^{\circ}\text{F}$ ) below the average combustion chamber temperature of the thermal oxidizer during the most recent performance test.

### **40 CFR Part 63 Subpart KK Emission Limitations**

The permittee has chosen to demonstrate compliance with 40 CFR 63.825(b) by complying with the following requirement each calendar month. To demonstrate compliance with other available compliance options, the permittee shall notify the Division in advance with a proposed compliance demonstration, monitoring, recordkeeping and reporting plan to be approved.

1. Total HAP emissions each month from the presses, coaters, and laminators shall be limited to a maximum of 5% of the total HAP applied.

### **Compliance Demonstration Method:**

Total HAPs applied by the presses, coaters, and laminators over a month shall be controlled so that no more than 5% by weight is emitted into the atmosphere. In accordance with 40 CFR 63.825(b)(7), this can be accomplished by controlling the quantity of HAPs applied on each press, coater, or laminator and operating capture and control systems so that an overall organic HAP control efficiency of at least 95% is demonstrated at the source each month. 40 CFR 63.825(f)(3), (5), and (7) describe this demonstration.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

The following describes the specific compliance demonstration for this source.

- The total mass of organic HAP applied by the presses, coaters, and laminators at the source shall be determined through record keeping and testing (if required) described elsewhere in this permit.
- Capture and control efficiency of control systems shall be demonstrated initially through performance tests and subsequently assumed based on monitoring and record keeping described elsewhere in this permit.
- The source's overall organic HAP control efficiency shall be calculated using above data in the following equations.

Overall organic HAP control efficiency =  $(1 - HAP \text{ emitted} / HAP \text{ applied}) \times 100\%$  Where,

**HAP emitted** =  $\Sigma$  [HAP applied at each press, coater, or laminator station during control device utilization at the station

x (1 - capture efficiency at the press, coater, or laminator during the HAP application x control efficiency of the oxidizer that the press, coater, or laminator is vented to)]

 $+\Sigma$  (HAP applied at each press, coater, or laminator station when emissions from the station are not vented to a control device)

**HAP applied** =  $\Sigma$  (HAP applied at each press, coater, or laminator)

And,

HAP applied at each press, coater, or laminator =  $\Sigma$  (quantity of ink, solvent, coating, adhesive, or other material applied at the press, coater, or laminator x total organic HAP content of the ink, solvent, coating, adhesive, or other material applied)

Compliance is demonstrated if the data for each month yields an overall organic HAP control efficiency of 95% or more.

# **Testing Requirements:**

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The following requirements with the exception of units L8 and L9, applies to each press, coater, and laminator at the source.

- 1. To demonstrate compliance with requirements resulting from applicability of 401 KAR 59:212 (except at units L8 and L9) or 40 CFR 63 Subpart KK, VOC content, solids content, and water content of inks, coatings, solvents, adhesives, and other materials shall be determined as required for compliance demonstration using;
  - **a.** Reference Method 24 in Appendix A of 40 CFR 60,
  - **b.** Formulation data from the coating, solvent, or other material manufacturer, or
  - An alternative technique approved by the division and the U.S. EPA.

VOC content may be used to demonstrate compliance with 40 CFR 63 Subpart KK in accordance with 40 CFR 63.827(b)(2) if maximum organic HAP content is assumed to be equal to VOC content. In the event of any inconsistency between any of the

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

accepted techniques, Method 24 test results shall govern unless the permittee can satisfactorily demonstrate to the Division and the U.S. EPA that other data is more accurate.

# 40 CFR Part 63 Subpart KK

The following requirement applies to each press, coater, and laminator at the source.

- 2. If <u>Testing Requirement #1</u>, above, is not utilized to demonstrate compliance 40 CFR 63 Subpart KK requirements, organic HAP weight faction of inks, coatings, solvents, adhesives, and other materials shall be determined in accordance with 40 CFR 63.827(b)(2) using;
  - **a.** Reference Method 311 in Appendix A of 40 CFR 63,
  - **b.** Formulation data from the coating, solvent, or other material manufacturer, or
  - **c.** An alternative technique approved by the division and the U.S. EPA.

In the event of any inconsistency between any of the accepted techniques, Method 311 test results shall govern unless the permittee can satisfactorily demonstrate to the division and the U.S. EPA that other data is more accurate.

# **Specific Record Keeping Requirements:**

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The following requirements are a combination from the applicable regulations and denote the most stringent requirement resulting from application of the regulations. In addition to any stated regulation compliance, the following requirements apply to each press, coater, and laminator station always or intermittently vented to a control device as part of compliance assurance requirements for the applicable regulations.

- 1. As required by 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(x) and (xi), all calibration checks, adjustments, and maintenance performed on monitoring devices identified in Sections B and E of this permit shall be recorded and include date and time. Additionally, the nature of the repairs and adjustments shall be recorded as required by 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(12).
- 2. As required by 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(iii), maintenance of air pollution control equipment shall be recorded and include dates.
- 3. As required by 40 CFR 63.829(b)(1), 40 CFR 63.827(d)(2), and 40 CFR 63.10(b)(2)(viii) and (ix), all temperature, electrical current, pressure, monitoring system performance evaluation, control equipment inlet and outlet concentration, capture efficiency, and raw material utilization measurements made during performance testing shall be recorded.

### 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirement applies as part of compliance assurance requirements for the applicable regulation.

4. The source's overall HAP control efficiency shall be recorded for each month as required by 40 CFR 63.829(b)(1).

The following requirements also apply to each press, coater, and laminator station always or intermittently vented to a control device, except as identified in Requirement # 14, as a result of 40 CFR 63 Subpart A, general provisions, applicability referenced in 40 CFR 63.823.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- 5. As required by 40 CFR 63.829(b)(1) and 40 CFR 63.10(b)(2)(i) and (ii), the occurrence, including date and time, and duration of each process equipment and control equipment startup, shutdown, or malfunction shall be recorded.
- 6. The occurrence, including date and time, and duration of malfunctions or inoperative periods for each monitoring device described in Sections B and E of this permit shall be recorded as required by 40 CFR 63.10(b)(2)(vi), 40 CFR 63.829(b)(3), and 40 CFR 63.10(c)(5).
- 7. As required in 40 CFR 63.6(c)(3)(v), the startup, shutdown, and malfunction plan incorporated by reference into this permit shall be written and kept on record after developed. Upon request, the plan shall be made available for inspection by the division or authorized representatives for the life of the affected source or until the affected source is no longer subject to control requirements of 40 CFR 63 Subpart KK. In addition, if the plan is revised, previous (i.e., superseded) versions of the plan shall also be kept on record for a period of 5 years after each revision.
- 8. As required by 40 CFR 63.829(b)(1), 40 CFR 63.10(b)(2)(iv), and 40 CFR 63.6(e)(3)(iv), actions taken during periods of startup, shutdown, and malfunction that are different than the procedures specified in the SSM plan shall be recorded and include date and time.
- 9. As required by 40 CFR 63.829(b)(1), 40 CFR 63.10(b)(2)(v), and 40 CFR 63.6(e)(3)(iii), record all information necessary to demonstrate conformance with the SSM.
- 10. All documentation supporting division or U.S. EPA notifications shall be recorded as required by 40 CFR 63.10(b)(2)(xiv) and 40 CFR 63.829(b)(1).
- 11. Each period (including date, time, and duration) when a monitored parameter is out of its compliance range or emissions exceed an applicable limit shall be recorded (including occurrences due to startup, shutdown, or malfunction) as required in 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(7) and (8).
- 12. The nature and cause (if known) of any malfunction shall be recorded as required in 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(10).
- 13. All corrective actions taken or preventive measures adopted shall be recorded as required in 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(11).
- 14. The combined total process operating time in the reporting period **for all presses**, **coaters**, **and laminators** shall be recorded as required in 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(13).
- As required in 40 CFR 63.8(d)(3), the procedures of the monitoring system quality control program shall be written and kept on record for the life of the affected source or until the affected source is no longer subject to control requirements of 40 CFR 63 Subpart KK. Upon request, the written procedures shall be made available for inspection by the division or authorized representatives. In addition, if the performance evaluation plan contained in the monitoring system quality control program is revised, previous (i.e., superseded) versions of the plan shall also be kept on record for a period of 5 years after each revision.

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

16. In accordance with 40 CFR 63.10(c)(15), actions or procedures utilized to comply with the monitoring system quality control program shall be recorded and include date of execution as required in 40 CFR 63.829(b)(3) and 40 CFR 63.10(c)(14). Duplicate records are not required if records of an action or procedure are otherwise required in this permit.

# 401 KAR 59:212

17. The weight percentage of VOC emitted from a facility (press, coater or laminator and mixing, storage and clean-up) shall be calculated and recorded for each 30-day period.

### 401 KAR 51:017

18. The combined amount (in tons) of VOC emitted during each month and each 12 consecutive month period from constructions prior to August 1999 group (including mixing, storage, and clean-up activities) shall recorded.

Where the constructions are: EP01, P1, P3, P4, P5, L1, L2, L3, and L4

19. The combined amount (in tons) of VOC emitted during each month and each 12 consecutive month period from constructions after August 1999 group (including mixing, storage, and clean-up activities) shall be recorded monthly.

Where the constructions are: EP05, P7, P9, P10, L5, L6, L7, L8, L9, and L10

## **Specific Reporting Requirements:**

# 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to each press, coater, and laminator station always or intermittently vented to a control device, except as identified in Requirements #2 and #8, as part of compliance assurance requirements for the applicable regulations. Requirements may apply as a result of 40 CFR 63 Subpart A, general provisions, applicability referenced in 40 CFR 63.823. Specific Reporting Requirements #3, #4, #5, and #8 apply solely due to requirements of 40 CFR Part 63 Subpart KK.

- 1. As required by 40 CFR 63.830(b)(4), 40 CFR 63.7(g)(1), 40 CFR 63.10(d)(2), and the division's policy manual which is incorporated by reference in 401 KAR 50:016 Section 1(1), performance test results shall be submitted within 45 days of fieldwork completion.
- 2. As required by 40 CFR 63.830(b)(3), 40 CFR 63.9(h), and, except for units L8 and L9, compliance demonstration for 401 KAR 59:212, notification of compliance status for all presses, coaters, and laminators at the source shall be submitted within 60 days of compliance demonstration test fieldwork completion and semiannually.
- 3. As required by 40 CFR 63.830(b)(5), 40 CFR 63.6(e)(3)(iii), and 40 CFR 63.10(d)(5), a start-up, shutdown, and malfunction report shall be submitted semiannually and the report shall state whether actions taken during start-ups, shutdowns, and malfunctions were consistent with the procedures in the SSM plan. If any actions taken were not consistent with the procedures in the SSM plan, also report the when the actions occurred.
- 4. As required by 40 CFR 63.6(e)(3)(iv) and 40 CFR 63.10(d)(5), actions taken during start-ups, shutdowns, and malfunctions that are not consistent with the procedures in

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

the SSM plan shall be reported by telephone call or FAX transmission to the division within 2 working days of commencing the action inconsistent with the plan and a letter shall follow within 7 working days after the conclusion of the action. If alternate reporting arrangements are made in advance with the division, reporting of inconsistent startup, shutdown, or malfunction actions may be altered in accordance with 40 CFR 63.10(d)(5)(ii).

- 5. If a malfunction or other event affects the monitoring systems and the event is not addressed by the SSM plan, corrective actions taken shall be reported within 24 hours after commencing the actions and a follow-up report shall be required within 2 weeks after commencing the actions in accordance with 40 CFR 63.8(c)(1)(ii).
- 6. As required by 63.830(b)(6), 40 CFR 63.10(e)(3)(i), and compliance demonstration for 401 KAR 59:212, semiannually report violations of temperature, electrical current, and pressure limitations described in Sections B and E of this permit. Include date, time, and duration of each violation.

Note: Since activation of interlock will cause the affected unit to cease operation, interlock activation is not considered a violation of a limit and therefore does not require reporting.

- As required by 63.830(b)(6), 40 CFR 63.10(e)(3)(i), and compliance demonstration for 401 KAR 59:212, semiannually report the operating condition of each monitoring system, including actions taken and observations made during the period to comply with the monitoring system quality control program.
- **8.** As required by 63.830(b)(6) and 40 CFR 63.10(e)(3)(vi), a summary report for **all presses, coaters, and laminators** at the source for hazardous air pollutants shall be submitted semiannually and entitled "Summary Report-Gaseous Excess Emission and Continuous Monitoring System Performance". In addition to the above certification requirements, the report shall contain;
  - **a.** The facility's name and address,
  - **b.** An identification of the hazardous air pollutants emitted at the source,
  - **c.** Beginning and ending dates of the reporting period,
  - **d.** A brief description (identification, for example: P1, P3, etc.) of the process units at the source,
  - **e.** The MACT emission limitation that applies to the source each month,
  - **f.** The monitoring equipment manufacturers and model number,
  - **g.** The dates of calibration checks in the reporting period,
  - **h.** The total combined operating time of the process units in the reporting period,
  - i. The overall organic HAP control efficiency achieved by capture and control systems each month,
  - j. The duration of excess emissions (Identify period when no excess emissions occur. Excess emissions are assumed to occur when valid monitoring data does not show compliance with temperature or pressure limitations in Sections B and E of this permit or when the applicable MACT emission limitation was not complied with.),
  - **k.** The percentage of the operating time in the reporting period when excess emissions occurred (including breakdowns for excess emissions due to start-up/

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

shutdown, control equipment problems, process problems, other known causes, and other unknown causes),

- I. The monitoring systems downtime each month (Identify periods when no monitoring downtime was experienced. Measure downtime only when process units are in operation.),
- **m.** The percentage of the downtime in the reporting period (including breakdowns for downtime due to monitoring equipment malfunctions, other known causes, and other unknown causes),
- **n.** A description of any changes in monitoring, compliance method, the processes, or controls since the last reporting period, and
- **o.** The date of the report.

#### 401 KAR 59:212

9. Semiannually report the weight percentage of VOCs emitted for each 30-day period ending in the respective semiannual periods.

#### 401 KAR 51:017

The following shall be reported semiannually. These reports shall be certified by a responsible official, and delivered by electronic media (such as fax or e-mail) or postmarked to the Division's Frankfort Regional Office within thirty days following March 31<sup>st</sup>, June 30<sup>th</sup>, September 30<sup>th</sup>, and December 31<sup>st</sup>, respectively. These reports may also be delivered by courier as long as the reports are stamped when received as indicated above. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate, and complete.

- **10.** Any deviations from requirements of 401 KAR 51:017 during the semiannual period shall be reported.
- 11. The combined amount (in tons) of VOC emitted from Constructions Prior to August 1999 (including mixing, storage, and clean-up) each month in the semiannual period shall be reported.
  - Where the constructions are: EP01, P1, P3, P4, P5, L1, L2, L3, and L4
- 12. The combined amount (in tons) of VOC emitted from Constructions After to August 1999 (including mixing, storage, and clean-up) each month in the quarter shall be reported.

Where the constructions are: EP05, P7, P9, P10, L5, L6, L7, L8, L9, and L10

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

<u>Thermal Oxidizers -</u> The VOC control efficiency used for calculations shall be the control efficiency demonstrated during the most recent control efficiency test.

**Control Device #3:** is a ER-93219R-939204 regenerative thermal oxidizer manufactured by

Thermo Electron.

The control device was installed in June of 1994 and demonstrated through stack testing a VOC control efficiency of 99.47% on June 28,

2005.

**Control Device #6:** is a II-400-94R regenerative thermal oxidizer manufactured by Megtec

Enterprises.

The control device was installed in June of 2000 and demonstrated through stack testing a VOC control efficiency of 98.15% on December

17, 2003.

**Control Device #7:** is a Model TR6094C regenerative thermal oxidizer manufactured by

L&E. The control device was installed in April 2004 and demonstrated through stack testing a VOC control efficiency of 98.68% on December

8, 2004.

Control Device #8, 9 &10: are regenerative thermal oxidizers projected to be installed in late

2005 through 2007.

Note: The following limitations and requirements are in addition to the limitations and requirements found in Sections B and D of this permit.

# Operating Limitations: (Applicable to Control Device #3, 6, 7, 8, 9 and 10) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical.

1. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit of the thermal oxidizer.

#### **Compliance Demonstration Method:**

Compliance shall be demonstrated by continuously recording temperature in the combustion chamber at a location in the combustion zone and calculating the 3-hr

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

average operating temperature at 15-minute intervals.

- 2. For each control device, 40 CFR 63.828(a)(4)(i) and (a)(2)(ii) requires installation, calibration, maintenance, and operation, in accordance with manufacturer specifications, of a temperature monitoring device equipped with a continuous recorder in the combustion chamber at a location in the combustion zone.
- 3. In accordance with 40 CFR 63.828(a)(4)(i) and (a)(2)(ii), the temperature monitoring devices required in Operating Limitation #2 shall be accurate within 1% of the 3-hr average temperature measured during the most recent performance test on each oxidizer and calibration shall be verified every 3 months or, as an alternative to calibration, the respective devices shall be replaced.

Note: Limitations #2 and #3 are required to demonstrate compliance with <u>Operating</u> Limitation #1.

# <u>Testing Requirements</u>: (Applicable to Control Device #3, 6, 7, 8, 9 and 10) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The permittee shall submit test protocols at least 60 days prior to performance testing and testing shall be conducted under representative operating conditions (contact division representatives if clarification is required). In accordance with 40 CFR 63.827(d)(2), start-up, shutdown, and malfunction are not representative conditions.

- During the performance test, the permittee shall monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee shall monitor the temperature in the firebox of the thermal oxidizer or immediate downstream of the firebox before any substantial heat exchange occurs.
- 2. VOC and HAP control efficiency realized by each control device shall be determined in accordance with 40 CFR 63.827(a) and (d) using appropriate EPA testing methods by the dates established in accordance with Section G(d)5 of this permit and at least every 5 years for each control device.

# **Specific Monitoring Requirements:** (Applicable to Control Device #3, 6, 7, 8, 9 and 10) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirement applies to make compliance demonstration with the applicable regulations practical.

1. In accordance with 40 CFR 63.825(d)(1), temperature in each oxidizer combustion chamber at a location in the combustion zone shall be monitored continuously when any of the presses or laminators vented to the oxidizer is applying any material which contains a VOC.

# **Specific Record Keeping Requirements:** (Applicable to Control Device #3, 6, 7, 8, 9 and 10) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The requirements from these regulations have been combined to denote the most stringent requirement resulting from application of both the regulations. In addition to any stated regulation compliance, the following requirement applies to make compliance demonstration with the applicable regulations practical.

1. The permittee shall maintain a record of performance test date, realized operation

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

temperature and control efficiency of the oxidizer.

2. As required by 40 CFR 63.829(b)(1) and (3), 40 CFR 63.10(b)(2)(vii), and 40 CFR 63.10(c)(1), temperature monitoring described above shall be recorded continuously by a strip chart, electronic recording, or some other continuous recording device. The 3-hr

average measurements shall be calculated and recorded every 15 minutes. 3-hr average

calculations shall not include monitoring data recorded during periods of unavoidable monitoring system breakdowns, repairs, maintenance, and calibrations as required in 40 CFR 63.8(g)(5) and referenced in 40 CFR 63.823.

<u>Catalytic Oxidizers-</u> The VOC control efficiency used for calculations shall be the control efficiency demonstrated during the most recent control efficiency test.

**Control Device #4:** is a sacrificial catalyst followed by a recuperative catalytic oxidizer,

was manufactured by Thermo Wisconsin.

The control device was installed in October of 1998 and demonstrated through stack testing a VOC control efficiency of 99.35% on

November 10, 2004.

**Control Device #5:** is a Magnum 600-70-6-C recuperative catalytic oxidizer manufactured

by Megtec.

A sacrificial catalyst precedes the main control unit.

The control device was installed in August of 1999 and demonstrated through stack testing a VOC control efficiency of 99.84% on

November 12, 2004.

Note: The following limitations and requirements are in addition to the limitations and requirements found in Sections B and D of this permit.

# **Operating Limitations:** (Applicable to Control Device #4 and 5)

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical.

1. The permittee shall use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limit of the catalytic oxidizer.

### **Compliance Demonstration Method:**

Compliance shall be demonstrated by continuously recording temperature at the catalyst bed inlet and calculating the 3-hr average operating temperature at 15-minute intervals.

2. For each catalytic oxidizer, 40 CFR 63.828(a)(4)(ii) and (a)(2)(ii) requires installation, calibration, operation, and maintenance in accordance with manufacturer specifications, of a temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

3. In accordance with 40 CFR 63.828(a)(4)(ii) and (a)(2)(ii), the temperature monitoring device required in Operating Limitation #2 shall be accurate within 1% of the 3-hr average temperature measured during the initial or most recent performance test on each oxidizer and calibration shall be verified every 3 months or, as an alternative to calibration, the device shall be replaced.

# <u>Testing Requirements</u>: (Applicable to Control Device #4 and 5) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

- 1. During the performance test, the permittee shall monitor and record the temperature just before the catalyst bed and the average temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.
- 2. VOC and HAP control efficiency realized by the control device shall be determined in accordance with 40 CFR 63.827(a) and (d) using appropriate EPA testing methods by the dates established in accordance with Section G (d) 5 of this permit and at least every 5 years for each control device. The permittee shall submit a test protocol at least 60 days prior to performance testing and testing shall be conducted under representative operating conditions (contact division representatives if clarification is required). In accordance with 40 CFR 63.827(d)(2), start-up, shutdown, and malfunction are not representative conditions.
- 3. As part of continued compliance demonstration, catalyst activity shall be confirmed annually through core sampling and analysis by the manufacturer or independent laboratory, except when established through testing described in requirement #1.

# **Specific Monitoring Requirements:** (Applicable to Control Device #4 and 5) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirement applies to make compliance demonstration with the applicable regulations practical.

1. In accordance with 40 CFR 63.825(d)(1), temperature of the vent stream at the nearest feasible point to the catalyst bed inlet shall be monitored continuously when the unit is applying any material which contains a VOC.

# **Specific Record Keeping Requirements:** (Applicable to Control Device #4 and 5) 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The requirements from these regulations have been combined to denote the most stringent requirement resulting from application of both the regulations. In addition to any stated regulation compliance, the following requirement applies to make compliance demonstration with the applicable regulations practical.

- 1. The permittee shall maintain a record of performance test date, realized operation temperature and control efficiency of the oxidizer.
- 2. As required by 40 CFR 63.829(b)(1) and (3), 40 CFR 63.10(b)(2)(vii), and 40 CFR 63.10(c)(1), temperature monitoring described above shall be recorded continuously by a strip chart, electronic recording, or some other continuous recording device. The 3-hr average measurements shall be calculated and recorded every 15 minutes. 3-hr average calculations shall not include monitoring data recorded during periods of unavoidable

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

monitoring system breakdowns, repairs, maintenance, and calibrations as required in 40

CFR 63.8(g)(5) and referenced in 40 CFR 63.823.

**3.** Results of catalyst activity testing shall be recorded as part of oxidizer control efficiency demonstration.

### **Building Enclosures**

are utilized by the referenced units and are described by EPA Method 204

All VOC emissions are vented from each building enclosure through oven exhausts and subsequently through one or more control devices. Capture efficiency, by definition, is 100%.

Note: The following limitations and requirements are in addition to the limitations and requirements found in Sections B and D of this permit.

### **Building Enclosure Operating Limitations:**

## 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following limits apply to make compliance demonstration with the applicable regulations practical.

1. In accordance with 40 CFR 63.825(d)(1)(xi), pressure differential across each building enclosure shall be at least 0.007 in H<sub>2</sub>O (0.013 mm Hg) into the building enclosure during operation of affected units.

## **Compliance Demonstration Method:**

Average 1-hr pressure differentials shall be calculated at least once every 15 minutes using continuous monitoring data when any affected unit in the enclosure is operating. If the average 1-hr pressure differentials are at least 0.007 in  $H_2O$  (0.013 mm Hg) into the building enclosure, compliance is demonstrated.

2. To measure pressure differential between the inside and outside of each building enclosure, differential pressure gages with a continuous recorders shall be installed, calibrated, maintained, and operated in accordance with manufacturer's instructions.

Note: Limitation #2 is required as part of compliance demonstration for <u>Operating</u> Limitation #1.

- 3. Cargo doors into each building enclosure shall be programmed to close automatically when not in use. Cargo doors will be equipped with alarms that shall activate when the door are open for longer than five minutes.
- 4. The cargo doors for the building enclosure for Presses 1 and 7 shall be interlocked so that only one cargo door into the enclosure may be open at a time.
- 5. Building enclosures shall be equipped with audible and visual alarms that activate when the one-hour pressure differential is less than 0.008 in H2O into the building enclosure
- 6. Man size entrances into each building enclosure shall utilize doors that close automatically (or an equivalent).

# **Compliance Demonstration Method:**

Functioning spring-loaded hinges or equivalents may be used to demonstrate compliance with this condition.

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

# **Building Enclosure Testing Requirements:**

# 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The following requirement applies to make compliance demonstration with the applicable regulations practical.

1. Initially, capture efficiency of each enclosure shall be demonstrated through EPA Method 204.

### **Building Enclosure Specific Monitoring Requirements:**

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical.

- 1. In accordance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), pressure differential across the building enclosure shall be monitored continuously when an affected unit is operating.
- 2. Functionality (operating normally, operating with something wrong, or fails to operate) of mechanisms used to comply with <u>Building Enclosure Operating Limitations #3 #6</u> shall be monitored at least once a month except initially and when a mechanism fails. Initially, functionality of the mechanisms shall be monitored at least once a week for 4 consecutive weeks. Additionally, if a mechanism fails, functionality of the mechanisms shall be monitored at least once a week until 4 consecutive weeks without a failure is subsequently realized.

#### **Building Enclosure Specific Record Keeping Requirements:**

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical. In accordance with 40 CFR 63.10(b)(1), record keeping data shall be retained on site for at least 2 years.

- As required by 40 CFR 63.829(b)(1) and (3), 40 CFR 63.10(b)(2)(vii), and 40 CFR 63.10(c)(1), pressure differential monitoring described in <u>Building Enclosure Specific Monitoring Requirement #1</u> shall be recorded. In addition, continuous pressure differential data shall be averaged for 1-hr periods and recorded at least once every 15 minutes when an affected unit in the building enclosure is operating.
- 2. Observations made as a result of compliance with <u>Building Enclosure Specific Monitoring Requirement #2</u> shall be recorded. Additionally, maintenance of the mechanisms shall be recorded and include date.

### **Enclosures for Applicators Only**

are utilized by the referenced units and are described by EPA Method 204.

All VOC emissions are vented from each enclosure through oven exhausts or an independent enclosure exhaust and subsequently through a control device. Capture efficiency, by definition, is 100%.

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

Note: The following limitations and requirements are in addition to the limitations and requirements found in Sections B and D of this permit.

### **Applicator Enclosure Operating Limitations:**

# 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following limits apply to make compliance demonstration with the applicable regulations practical.

- In accordance with 40 CFR 63.828(a)(5), affected units shall be operated only when interlocked with adequate capture. As a result of interlock utilization, electrical current measuring devices, pressure actuator switches, and door position monitors and timers shall be installed, calibrated, maintained, and operated where appropriate in accordance with manufacturer's instructions. See <u>Applicator Enclosure Operating Limitations #2, #3, and #4</u> for minimum parameter requirements demonstrating adequate capture that, unless maintained, shall cause the interlock to cease operation of the laminator.
- 2. In accordance with 40 CFR 63.828(a)(5), airflow from each applicator enclosure during laminating, coating, or printing in the enclosure shall be adequate to demonstrate that the enclosure is a permanent total enclosure.

# **Compliance Demonstration Method:**

Initial airflow demonstrations were performed utilizing EPA Method 204. Subsequent demonstration shall be performed by interlocking operation of each affected unit to continuous electrical current measurements of each fan from the applicator enclosures to the oxidizer. If electrical current measurements meet or exceed the electrical current measurements shown to generate 200 ft/min or more of airflow through all natural draft openings (NDOs) in each applicator enclosure, then the interlock will allow operation. However, if any electrical current measurement isn't adequate, the interlock will cause the affected unit to cease operation.

3. In accordance with 40 CFR 63.828(a)(5), except when an applicator is part of wet bond lamination, negative pressure shall be maintained in each oven during laminating, coating, or printing at applicators immediately preceding the respective ovens.

## **Compliance Demonstration Method:**

Compliance demonstration shall be performed by interlocking operation of the affected units to pressure actuator switches in the respective oven exhausts.

4. In accordance with 40 CFR 63.828(a)(5), respective doors on the applicator enclosures shall under no circumstance be open for more than 5 consecutive minutes during laminating, coating, or printing operations at each applicator.

### **Compliance Demonstration Method:**

Compliance demonstration shall be performed by interlocking operation of the laminator to applicator enclosure doors. If all doors are closed, then the interlock will allow operation. However, if any applicator enclosure door is open for 5 consecutive minutes during laminating, coating, or printing operations, the interlock will cause the laminator to cease operation.

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# SECTION E - SOURCE CONTROL EQUIPMENT DESCRIPTIONS AND REQUIREMENTS (CONTINUED)

# **Applicator Enclosure Testing Requirements:**

## 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

The following requirement applies to make compliance demonstration with the applicable regulations practical.

1. Initially, capture efficiency of each enclosure shall be demonstrated through EPA Method 204.

# **Applicator Enclosure Specific Monitoring Requirements:**

# 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical.

- 1. In accordance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), the electrical current for fans in vents from the applicator enclosures to the oxidizer shall be monitored continuously during laminating, coating, or printing in the respective enclosures.
- 2. In accordance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), pressure actuator switches in the oven exhausts shall be monitored continuously when an applicator immediately preceding the respective oven is operating (except when wet bonding is performed).
- 3. In accordance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), the position (closed or open) of enclosure doors and amount of time open shall be monitored continuously during laminating, coating, or printing in the respective enclosures.

Note: According to the source's application, monitoring described in requirements 1 - 3, above, shall be part of the interlock on the laminator.

4. To demonstrate compliance with 40 CFR 63.825(d)(1) and 40 CFR 63.828(a)(5)(iii), proper operation of the door interlocks shall be verified semiannually and proper operation of the pressure actuator switches and flow interlocks shall be verified annually. Verifications shall confirm that calibrations for pressure actuation, flow, and door position remain accurate and that settings have not changed. If necessary, make corrections during the verification so that the result is no net change in the interlock effectiveness.

# **Applicator Enclosure Specific Record Keeping Requirements:**

### 401 KAR 59:212 and 40 CFR Part 63 Subpart KK

In addition to any stated regulation compliance, the following requirements apply to make compliance demonstration with the applicable regulations practical. In accordance with 40 CFR 63.10(b)(1), record keeping data shall be retained on site for at least 2 years.

- 1. As required by 40 CFR 63.829(b)(1) and (3), 40 CFR 63.10(b)(2)(vii), and 40 CFR 63.10(c)(1), the electrical current for fans in vents from the applicator enclosures to the oxidizer determined to result in 200 ft/min or more of airflow through all NDOs in each applicator enclosure shall be recorded.
- 2. As required by 40 CFR 63.829(b)(1), record each date when proper operation of the laminator's interlock is verified. Record the observed interlock settings and the accuracy of the interlocks (prior to any correction changes).

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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# SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, Suite B Frankfort, KY 40601

U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

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### **SECTION G - GENERAL PROVISIONS**

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

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## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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# **SECTION G - GENERAL PROVISIONS (CONTINUED)**

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

# (b) <u>Permit Expiration and Reapplication Requirements</u>

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

## (c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u> Pertaining to EP16 (L7), EP18 (P9), EP20 (L6), and EP17 (L10)

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points 16, 17, 18, & 20 in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.KAR 51:017 or 401 KAR 51:052 shall not expire.

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# **SECTION G - GENERAL PROVISIONS (CONTINUED)**

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test

- 6. Terms and conditions in this permit established pursuant to the construction authority of 401KAR 51:017 or 401 KAR 51:052 shall not expire.
- 7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

### (e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

### (f) Emergency Provisions

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

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## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

- e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

## (g) <u>Risk Management Provisions</u>

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

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# **SECTION G - GENERAL PROVISIONS (CONTINUED)**

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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# **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

# **SECTION I - COMPLIANCE SCHEDULE**

None